

Acquisition Management Policy - (4/2014)

[4.4 Test and Evaluation](#) Revised 11/2009

[4.4.1 Service Analysis, Concept and Requirements Definition, and
Investment Analysis](#) Revised 4/2013

[4.4.2 Solution Implementation](#) Revised 1/2012

[4.4.3 In-Service Management](#) Revised 11/2009

4.4 Test and Evaluation Revised 11/2009

Test & Evaluation is conducted in accordance with the AMS Test and Evaluation Process Guidelines found on FAST. The objectives are to:

- Provide essential information in support of decision-making;
- Provide essential information for assessing technical and investment risks;
- Verify the attainment of technical performance specifications and objectives; and
- Verify and validate that investment products are operationally effective and suitable for the intended use.

4.4.1 Service Analysis, Concept and Requirements Definition, and Investment Analysis

Revised 4/2013

During service analysis, test and evaluation activities help in the identification and prioritization of the critical FAA needs. During concept and requirements definition, test and evaluation helps determine the best alternative solutions to those needs. During investment analysis, the criteria for testing operational effectiveness and suitability are expressed as critical operational issues in the program requirements document. T&E strategy and implementation activities are defined in the implementation strategy and planning document. They describe the overall T&E program for verifying achievement of technical performance requirements and development of operationally suitable investment products.

4.4.2 Solution Implementation Revised 1/2012

All system/software and facility investment programs follow a structured, disciplined T&E process appropriate to the product or facility being tested. Initially, test and evaluation in solution implementation assesses potential operational, safety, and security risks and identifies opportunities for risk mitigation. Later it examines operational readiness and supplies data to decision-makers in support of the production and in-service decisions.

A typical T&E program consists of developmental test, operational test, site acceptance testing, and field familiarization testing, as well as independent operational assessment for designated programs (see Section 4.5). Test and evaluation of commercial and non-developmental items is tailored to account for test results already available from vendors. For example, an operational capability demonstration may reduce system test requirements. As part of field familiarization testing, all systems/software products normally require site operational testing and information security testing to support the site operational readiness decision.

4.4.3 In-Service Management Revised 11/2009

The Test and Evaluation Gold Standard and Implementation Guide defines standards for the development and implementation of all modifications to the National Airspace System during in-

service management. It includes a standardized testing process that lists the phases and detailed activities to be addressed. The Gold Standard process as designed will support/ensure that the activity of safety risk management is address in the FAA.

The Test and Evaluation Gold Standard Matrix is used as a management tool to record development and test status, improve internal and external communications, and support risk assessment using best business practices. This document is applicable to all NAS modifications across all FAA organizations.